

ABSTRACT OF THE DISCLOSURE

An optical element and a manufacturing method therefor, an exposure
apparatus, and a device manufacturing method that can reduce the effect of intrinsic
5 birefringence under high NA conditions. According to an optical element as one
aspect of the present invention, an angle between a $[0\ 0\ 1]$ axis of an isometric crystal
and an optical axis is less than 10° , and preferably 0° .